

REMARKS/ARGUMENTS

Claims 1-18 stand rejected in the outstanding Official Action. Claims 2 and 15 have been cancelled, claims 1, 6, 8-14, 16-18 amended and newly written claims 19 and 20 offered for consideration. Therefore, claims 1, 3-14 and 16-20 are the only claims remaining in this application.

The Examiner's consideration of the references submitted with Applicants' various Information Disclosure Statements is very much appreciated. However, Applicants have also claimed priority based upon a British filing and requests acknowledgment of that claim for priority. Applicants will be submitted a certified copy of that priority document in due course.

In section 1 of the Official Action, there does not appear to be any objection or rejection of the specification. However, inasmuch as the originally submitted Abstract was somewhat less than the required 50-150 words, Applicants offer an amended Abstract falling within the requirements. Consideration and entry of the amended Abstract is respectfully requested.

Claims 1-18 stand rejected under 35 USC §103 as unpatentable over Daniel (U.S. Patent 6,157,681) in view of Windyka (U.S. Patent 5,592,179).

Applicants' invention is a method and apparatus for receiving and processing a signal transmitted by a transmitter. It does not relate to the transmission of such a signal. Specifically, the method and apparatus utilizes a phased array receiving antenna, adjusts the phase array antenna to receive the signal where the adjusting step includes the steps

of determining the direction of incidence of the signal and electronically steering the phased array antenna towards that signal and then reading information from the received signal.

In order to render obvious Applicants' independent claim 1 and claims dependent thereon, it is necessary that each of the claimed structures and method steps be disclosed in at least one of the cited prior art references. However, the features of the claimed method and apparatus are not disclosed in the cited prior art.

For example, the Examiner states that "Daniel et al discloses a method of reading information from a signal transmitted by a transmitter (18 of fig. 2)." This statement is believed incorrect, as item 18 is a transmitter and is not described as being a receiver. The reference to Figure 2 at column 2, lines 11-13 of Daniel indicates that it is a "block diagram of an antenna array transmitting apparatus configured in accordance with the teaching of the present invention." The transmitted signal is shown in Figure 1 as signal beam 16. Thus, the Examiner's initial statement that Daniel teaches "a method of reading information from a signal" is simply not disclosed in Figure 2 as alleged by the Examiner.

The Examiner goes on to correctly note that Daniel does teach a phased array antenna, but fails to note that this is a transmitting antenna, rather than a receiving antenna (while phased array antennas can transmit and receive, there is no disclosure in Daniel of Applicants' claimed method of reception). The Examiner also alleges that at column 1, lines 16-32 and column 6, line 50 to column 7, line 24 teach the adjustment of

the phased array antenna to receive the transmitted signal. Again, this allegation is incorrect. The column 1, lines 16-32 portion of the Daniel specification deals only with adjustable phase shifters amplitude adjusters which are used to permit electronic steering of the transmitted antenna beam. There is no disclosure of reception of a transmitted beam, let alone Applicants' claimed reception method.

Similarly, at column 6, beginning at line 50 and continuing over to column 7, line 24, there is a detailed discussion of the creation and the transmission of the transmitter beam, but Applicant can find no teaching of any portion of the cited Daniel specification directed to receiving or processing the receiving information or steering a phased array antenna with respect to receiving a signal. Therefore, the Examiner's representations as to what is taught or disclosed in the Daniel reference are believed to be clearly erroneous.

The Examiner does admit that the Daniel reference does not contain a teaching of three recited aspects in claim 1, i.e., the steps of reading information from a received signal, using a phased array antenna to determine direction of incidence and electronically steering the phased array antenna towards the signal." Inasmuch as these are the same three general method steps set out by claim 1, it is hard to imagine, especially in view of the above deficiencies in Daniel, why the Daniel reference was cited at all.

If Daniel does not teach the three main method steps, i.e., "providing," "adjusting" and "reading" and doesn't teach the alleged disclosures of reading information from a received signal as alleged by the Examiner, what is it that Daniel actually does teach?

Nevertheless, as noted above, Daniel fails to teach the portions of information alleged by the Examiner and the Examiner's further admissions of what Daniel does not teach are very much appreciated.

The Examiner does suggest that Windyka somehow fulfills and teaches the features which the Examiner concedes are not taught by the Daniel reference. Windyka clearly teaches a phased array antenna used with a frequency hopping transmitter. In the paragraph bridging pages 3 and 4 of the outstanding Official Action, the Examiner talks about a number of structures and interrelationships between structures which are shown or taught in the Windyka reference. Even assuming for the purpose of argument that the Examiner is correct in that each of these items is taught by Windyka, there are not alleged to be any teaching of receiving any signal, let alone adjusting a phased array antenna to receive the signal and ultimately reading information from the received signal.

Moreover, the alleged "correction phase shifters" referenced by the Examiner to be in Figures 3-5 (and the accompanying discussion in the specification) are all believed to relate to the transmitted beam and have nothing to do with the processing of a received beam. Should the Examiner believe otherwise, he is respectfully requested to point out where there is any discussion of controlling a phased array antenna with respect to a received beam, let alone the control manner set out in Applicants' claims.

Additionally, the Examiner, at the end of the paragraph bridging pages 3 and 4, suggests that it would be obvious to combine Windyka and Daniel. Firstly, since neither reference provides any disclosure with respect to receiving a signal antenna, even if they

were combined, there would be no disclosure of Applicants' claimed invention.

Moreover, neither reference contains any reason or motivation for combining the two references. It is noted that the burden is on the Patent Office to establish a *prima facie* case of obviousness and to show that there is some reason or motivation for combining the two references. Simply put, the Examiner has failed to meet this burden of proof and therefore there is no reason or basis for combining the Windyka and Daniel references.

It is also noted that the Examiner essentially copies the paragraph bridging pages 3 and 4 into the remainder of his Official Action, i.e., in the paragraph bridging pages 4 and 5, the paragraph, the paragraph bridging pages 6 and 7, the paragraph bridging pages 7 and 8, the paragraph bridging pages 8 and 9 and the first full paragraph on page 11.

Applicants do not believe that this virtually identical language adds any further substance to the Official Action. Inasmuch as claims 3-11 depend from claim 1, they are patentable over the Daniel/Windyka combination. Claims 12 and 16 are independent claims (claims 13 and 14 are dependent on claim 12 and claims 17 and 18 are dependent on claim 16) which also recite details of the receiver function of a phased array antenna and the structure for controlling the reception and reading of signals. Inasmuch as neither Daniel nor Windyka have any relationship to receiving signals or the processing thereof, they cannot anticipate or render obvious the subject matter of claims 11-14 or 16-18 and any further rejection thereunder is respectfully traversed.

Applicants have amended independent claim 1 to incorporate the subject matter of claim 2, limiting the adjusting step to using the antenna to determine the direction of

incidence and then electronically steering the antenna towards the received signal. The dependency of claim 6 has been corrected and claims 8-11 have been amended to limit the claims from which they depend to frequency modulated analog video signals.

Similarly, apparatus claims 12-14 and 16-18 are also limited to frequency modulated analog video signals. However, in view of the lack of art cited by the Examiner which discloses the processing of received signals, especially with a phased array antenna, there can be no obviousness or anticipation.

Applicant has added newly written claims 19 and 20, where claim 19, while limited to receiving a frequency modulated analog video signal and claim 20 merely being limited to receiving a video signal, otherwise broadly recite the method of original claim 1. Entry and consideration of newly written claims 19 and 20 is respectfully requested.

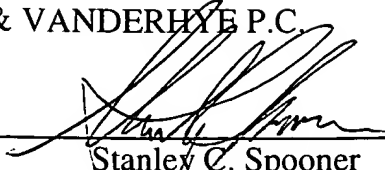
Having responded to all objections and rejections set forth in the outstanding Official Action, it is submitted that claims 1, 3-14, 16-20 are in condition for allowance and notice to that effect is respectfully solicited. In the event the Examiner is of the opinion that a brief telephone or personal interview will facilitate allowance of one or more of the above claims, he is respectfully requested to contact Applicants' undersigned representative.

WATSON et al
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Respectfully submitted,

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